

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P475356

Luminaire Tested: **14CZ2-39HE-UNV-L835-CD1-U**

Issue Date: 02/10/2021

Test Information

Test Method: LM-79-08
Report Number: P475356
Test Lab: INNOVATION CENTER(G3)
Issue Date: 02/10/2021
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: 14CZ2-39HE-UNV-L835-CD1-U
Description: 1'X4' TROFFER LED MODULE, HIGH EFFICIENCY,RIBBED LENS
Light Source: 3500K CCT, 80 CRI LEDS
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 3915.8 lumens
Efficiency: N/A
Efficacy: 137.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.29 / 1.37
Luminous Opening: Rectangular (W 1' x L: 4' x H: 0')
CIE Type: Direct

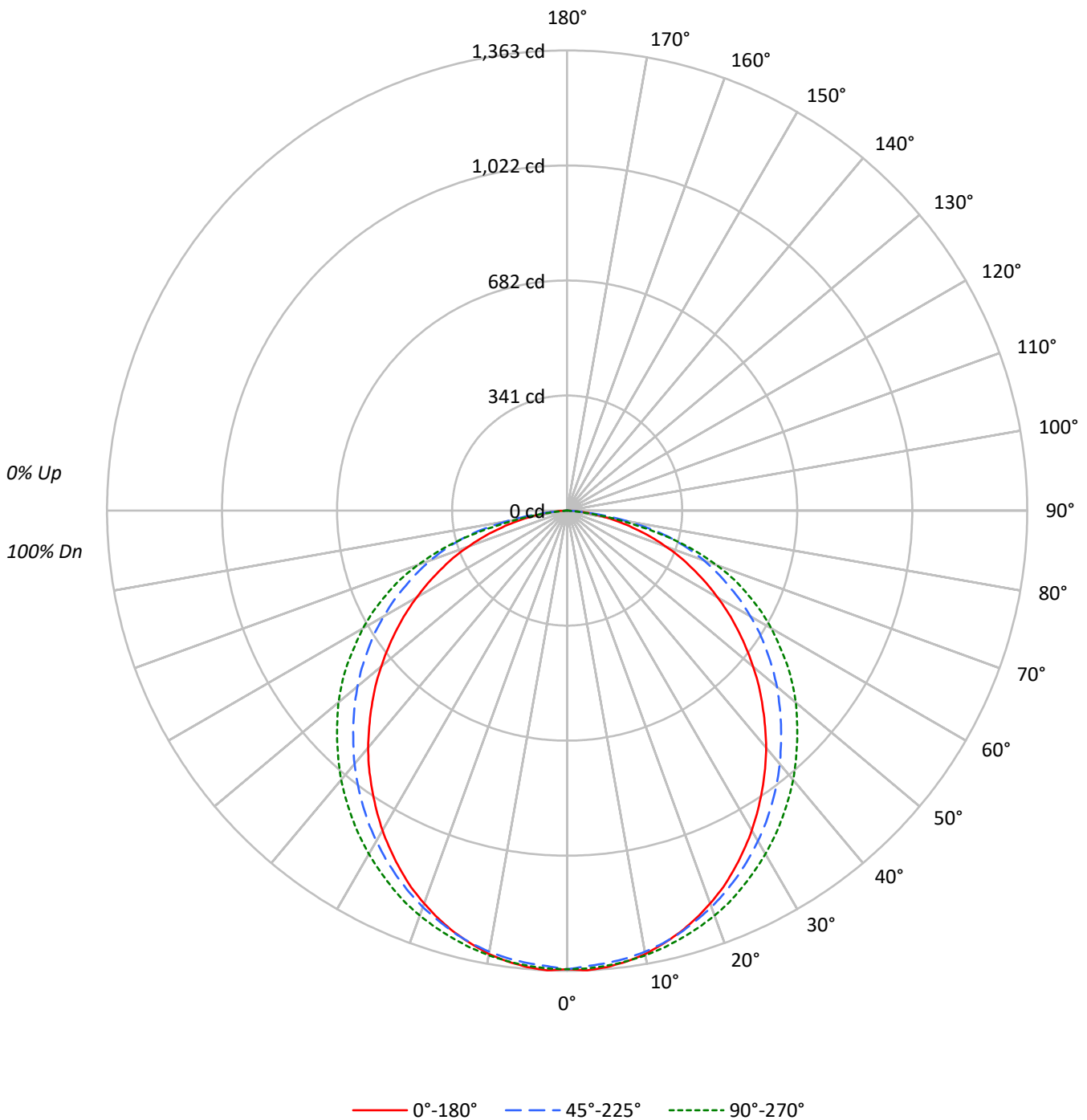
Input Watts (W): 28.4
Input Voltage (V): 120
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	109	104	99	96	106	102	98	94	97	94	91	93	91	88	90	88	86	83					83			
2	99	90	83	77	96	88	82	76	85	79	75	81	77	73	78	75	71	69					69			
3	90	79	71	64	87	77	70	63	74	68	62	72	66	61	69	64	60	58					58			
4	82	70	61	54	80	68	60	54	66	59	53	64	57	52	61	56	51	49					49			
5	75	62	53	46	73	61	53	46	59	51	46	57	50	45	55	49	45	42					42			
6	69	56	47	40	68	55	46	40	53	46	40	51	45	39	50	44	39	37					37			
7	64	51	42	36	63	50	41	35	48	41	35	47	40	35	46	39	35	33					33			
8	60	46	38	32	58	46	37	32	44	37	31	43	36	31	42	36	31	29					29			
9	56	42	34	29	55	42	34	28	41	33	28	40	33	28	39	32	28	26					26			
10	52	39	31	26	51	39	31	26	38	31	26	37	30	26	36	30	25	24					24			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	3656	3656	3656
5°	3666	3634	3655
10°	3644	3626	3655
15°	3602	3607	3653
20°	3546	3580	3655
25°	3478	3547	3652
30°	3400	3512	3650
35°	3310	3476	3650
40°	3221	3443	3659
45°	3115	3410	3667
50°	3010	3394	3702
55°	2896	3379	3733
60°	2768	3375	3760
65°	2627	3366	3768
70°	2446	3386	3696
75°	2169	3342	3315
80°	1819	2796	2256
85°	1275	1093	262



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	128.5	3.3
10°-20°	366.8	9.4
20°-30°	552.7	14.1
30°-40°	663.5	16.9
40°-50°	690.7	17.6
50°-60°	638.2	16.3
60°-70°	511.2	13.1
70°-80°	305.9	7.8
80°-90°	58.3	1.5
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1048.1	26.8
0°-40°	1711.5	43.7
0°-60°	3040.5	77.6
0°-90°	3915.8	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	3915.8	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	1358	1358	1358	1358	1358	
5°	1357	1354	1345	1355	1353	129
15°	1293	1293	1295	1311	1311	364
25°	1172	1178	1194	1225	1230	539
35°	1008	1023	1058	1100	1111	630
45°	819	843	896	949	964	632
55°	617	651	720	776	796	552
65°	413	455	529	580	592	409
75°	209	261	321	326	319	223
85°	41	60	35	14	8	53
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	1358.5	1358.5	1358.5	1358.5	1358.5
2.5°	1363.1	1359.1	1350.6	1359.1	1357.2
5°	1357.2	1353.9	1345.3	1355.2	1353.2
7.5°	1347.3	1344.7	1338.1	1348.6	1346.7
10°	1333.5	1331.6	1327.0	1338.8	1337.5
12.5°	1314.5	1315.2	1312.5	1327.0	1325.7
15°	1292.9	1292.9	1294.8	1311.2	1311.2
17.5°	1267.3	1268.6	1272.5	1294.2	1294.8
20°	1238.4	1241.7	1250.2	1272.5	1276.5
22.5°	1207.6	1211.5	1223.3	1249.6	1255.5
25°	1171.5	1178.1	1194.5	1224.7	1229.9
27.5°	1133.5	1143.3	1163.6	1196.4	1203.0
30°	1094.1	1104.6	1130.2	1165.6	1174.8
32.5°	1051.5	1065.3	1096.1	1133.5	1144.0
35°	1007.5	1022.6	1058.0	1100.0	1111.2
37.5°	963.6	980.0	1020.0	1065.3	1076.4
40°	917.0	936.0	980.0	1026.6	1041.6
42.5°	867.8	888.8	937.3	988.5	1002.9
45°	818.6	842.9	896.0	949.2	963.6
47.5°	770.7	795.7	853.4	908.5	923.6
50°	718.9	747.8	810.7	865.2	884.2
52.5°	668.4	700.6	766.8	821.9	840.9
55°	617.2	650.7	720.2	776.0	795.7
57.5°	567.4	602.8	676.3	731.4	745.2
60°	514.3	553.0	627.1	682.8	698.6
62.5°	464.4	504.4	579.2	633.0	648.1
65°	412.6	455.2	528.7	580.5	591.7
67.5°	364.1	406.7	480.8	525.4	536.6
70°	310.9	358.1	430.3	468.3	469.7
72.5°	260.4	308.3	378.5	402.8	399.5
75°	208.6	261.1	321.4	326.0	318.8
77.5°	162.0	214.5	255.8	241.4	227.0
80°	117.4	168.6	180.4	158.1	145.6
82.5°	77.4	118.1	108.9	78.1	66.9
85°	41.3	60.3	35.4	14.4	8.5
87.5°	15.7	10.5	3.9	3.3	2.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)